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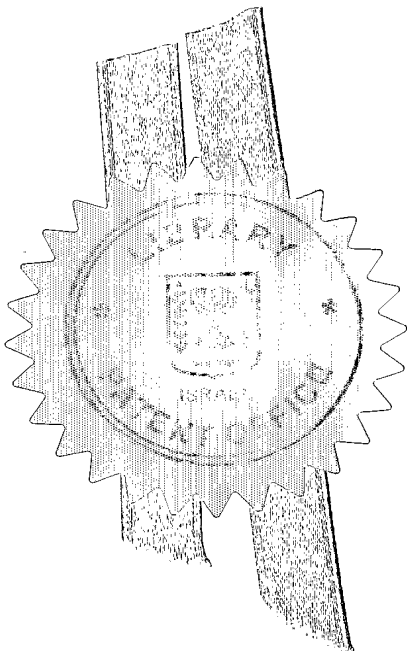
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חוק הפטנטים, התשכ"ז - 1967  
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## בקשה לפטנט

### Application for patent

אני, (שם המבקש, מענו - ולגבי גוף מאוגד - מקום התאגדותו)  
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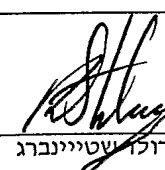
ששמה הוא:  
Owner, by virtue of

בעל אמצאה מכח חדין  
of an invention, the title of which is:

מערכת ידית וציר חכמה (בעברית)  
(Hebrew)

The smart handle and hinge system (באנגלית)  
(English)

מבקש בזאת כי יינתן לי עליה פטנט.  
hereby apply for a patent to be granted to me in respect thereof

* בקשת חלוקה - Application for Division		* בקשת פטנט מוסף - Application for Patent of Addition		* דרישת דין קדימה Priority Claim		
מבקשת פטנט from Application		לבקשה/לפטנט to Patent/Apl.		מספר/סימן Number/Mark	תאריך Date	מדינת האיגוד Convention Country
No _____ dated _____		No _____ dated _____				
* יפוי כח: כללי - רצוף בזה P.O..A.: general - attached						
הוגש בעניין Has been filed in case						
המען למסירת הודעות ומסמכים בישראל Address for Service in Israel						
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חתימת המבקש Signature of Applicant				היום _____ בחודש _____ שנת 2004 This _____ Of _____ 2004		
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**מערכת ידיית וציר חכמה**

**THE SMART HANDLE AND  
HINGE SYSTEM**

ROBERT STEINBERG  
THE SMART HANDLE AND HINGE SYSTEM  
ALTERNATING HINGE AND HANDLE CHOICES

1. FIELD AND BACKGROUND OF THE INVENTION

Currently doors and other locking facilities can only be opened from one side depending on the situs of the door handle and its hinges.

The Shorter Oxford English Dictionary, Oxford University Press, New York, 1973 Edition, defines the word hinge as “ the joint or mechanism by which a gate or door is hung upon the side post, as to be opened or shut by being turned upon it.” This definition clearly indicates the limitation in the operation of the door in that the handle and hinge are permanently fixed in the direction of the initial assembly.

Generally speaking the position of the handle and the hinges is permanently fixed on the left hand side or right hand side of the door respectively when facing the door. This means that doors are generally opened by engaging the handle on the left hand side causing the door to swivel on its hinges situate on the right hand side or vice versa.

The handle and hinges may be transferred to the other side(s) of the door when a user decides for whatever reason to utilize the opening facility differently by affixing both the handle and the hinges on the opposite side(s) of the door or other apparatus.

To do so entails having to embark on a home assembly or to engage the services of a technician at extra expense and unnecessary bother to move the hinges and reset the position of the door handles. A laborious and often costly procedure to the ultimate detriment of the user but to the financial advantage of the manufacturer or supplier. As things stand at the moment the user does not have an immediate choice of which side of the door he/she may wish to engage at any particular moment in time.

Handle and hinges assembled in a single fixed position are not only burdensome but also cumbersome in that they limit the opportunities that users thereof may have in being able to install compliances or other products in places assigned specifically for the installation.

The present handle and hinge system can best be described as a restricted mechanism in an ever increasing advanced environment. It is trite that the more flexible we make our tools the faster and less restricted our advance becomes.

## 2. SUMMARY OF THE INVENTION

The present invention embodies an innovative dual handle and hinge system enabling the user at his/her whim to decide upon which side of the door he/she may wish to access.

The invention relates to a novel handle and hinge system which will afford users of appliances and other facilities bearing doors or lids, the option of being able to open such doors, lids or locking facilities from the side of their choice without the need of having to call upon the services of a technician

This invention displays the most advanced and up to date technology and provides for the immediate needs of the user.

The invention has been donned as the "smart handle and hinge system".

The end user will be able to derive the maximum benefits, comfort, and pleasure by the utilization of a more flexible and compatible facility having regard to his/her personal needs and immediate surrounding environment.

The smart system provides for the interplay of immediate reversible and interchangeable hinges and handles by the use of either electronic, electrical, electro magnetic, mechanical, pneumatic, hydraulic and sonic modern technology embodying an up to date a self maintained logic controlled system.

In order to cancel out the hinge currently in use in the door, the user simply engages by touch the side desired to be opened and thereby automatically activates the hinges then not in use. The smart system is equipped with a fail safe mechanism that does not allow a hinge to be de-activated before the hinge on the opposite side of the door has been activated to now become the active hinge being used. In circumstances where both handles

are touched simultaneously, the system brings into play a safety mechanism, which ensures that the hinge then currently in use remains activated and in position. Its refusal to deactivate is attributable to the conflicting commands it has received from the user.

Similarly in the event of an electric power failure the system will embody a controller for only one side so as to ensure that the non -active hinge remains in a normal open state.

The possibility of dismantling the door will ensure easy delivery and the ability to convey the appliance through tight fitting doorways.

The system will derive its power supply from a variety of sources including the provision of rechargeable batteries positioned in the door receiving their power whilst the door is closed, a direct charge via the pin of the solenoids or by way of electronic plates affixed to the door.

The source of power to the system will be located in the door. The power will be transferred through the solenoids either left hand side solonoid or the right hand side solonoid (see diagram "A"). In the event of another source of supply being required (other than electricity) whether by use of water, air or oil, the system will embrace a storage tank in the door which will supply the requisite power while the door is in a closed position.

### **3. EXPLANATION OF THE DRAWINGS.**



The drawing attached hereto marked **Exhibit "A"** depicts a door with two handles and four hinges. The left hand side solenoids which are normally open (NO) have one positioned on the top of the left hand side of the door and one on the bottom of the left hand side of the door to act as potential hinges when brought by the user into play. By contrast the right hand side solenoids which are normally closed (NC) one positioned on the right top of door and one on the bottom of the said door to act as the left hand side of the door has a touch sensitive handle which activates the right hand side solenoid. The right hand side of the door has a touch sensitive handle which activates the left hand side solenoid. The hinge brackets have a female receptacle to house the pivots of the solenoid the door.

The drawing attached hereto marked **Exhibit "B"** depicts a close up of the hinge itself. The item Numbered 1 constitutes a Pin of the solenoid; the item numbered 2 represents the Solenoid; the item numbered 3 represents the Teflon insert and item number 4 represents the female receptacle for the pin to act as a hinge when engaged as well as to supply electricity to the hinge system.

### 3. WHAT IS CLAIMED IS:

① A door or lid with at least 1(one) hinge on either side.

② A box or frame with at least 1(one) hinge bracket on either side to match the hinge on the door or lid.

③ A release system on the hinge or hinge bracket on either side.

④ A control system to govern each of the hinges or brackets on either side.

A fail safe system to control the hinges so as not to allow the hinges to be released simultaneously.

A fail safe system to control the door or lid from detaching themselves in the event of a power failure.

A control system to allow both hinges to be released simultaneously so as to allow removal of the door or lid from the box or frame.

At least one (1) handle on either side of the door or lid to work in conjunction with an operational activator designed to activate the hinge required to be operative so as to thereby open the door or lid.

At least one power source whether derived from an electrical, electronic, mechanical, pneumatic hydraulic, spring release, electro magnetic or other source so as to supply the necessary power to activate the hinge system.

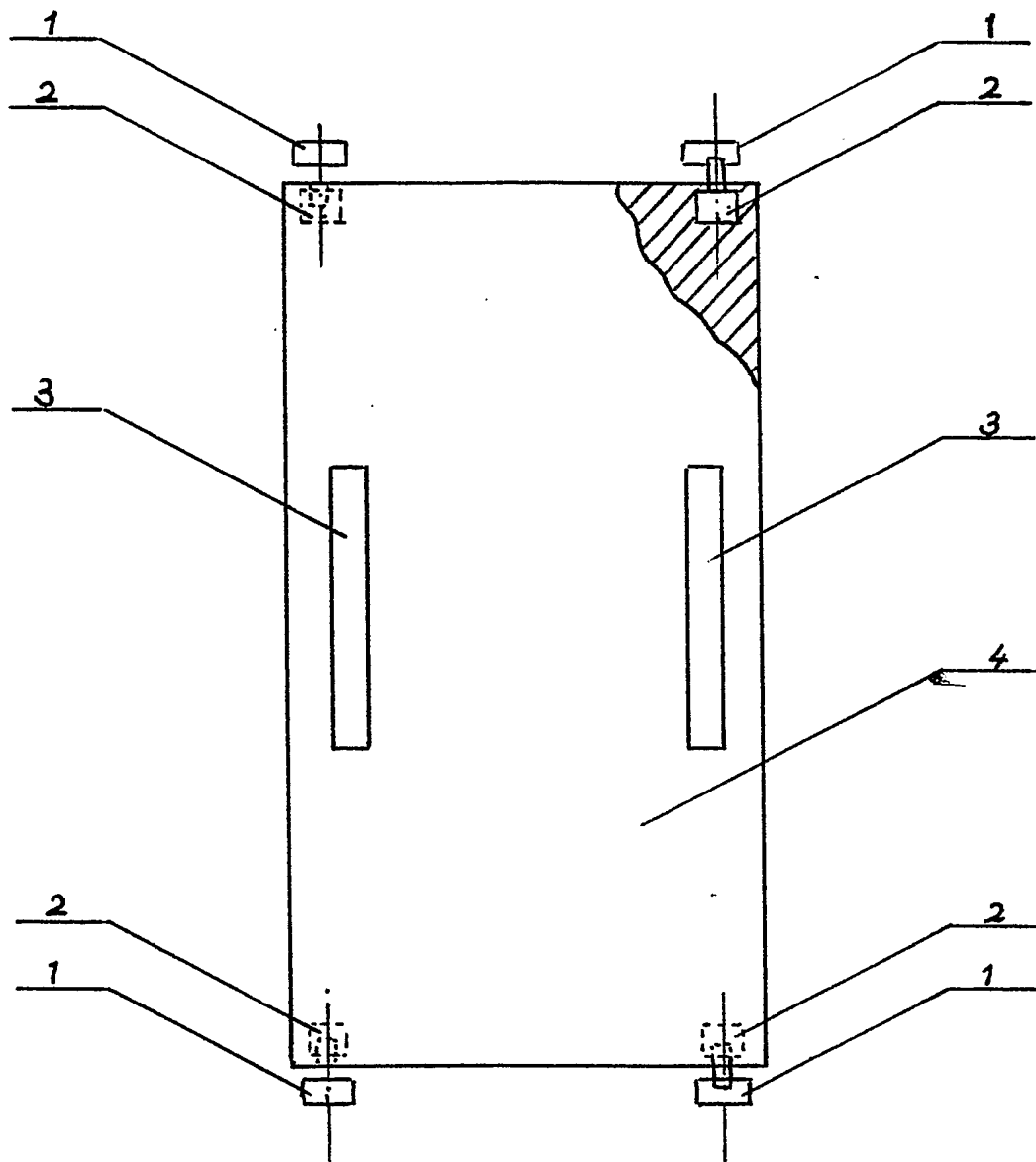
At least 1(one) control system so as to control either the hinge or hinge bracket on the door or lid to determine which hinge the door or lid will open on.

## 5.SUMMARY.

The above claims relate to a hinge handle system, which will in due course allow a door or lid to swing on at least one hinge at any given time on either the top or bottom or right or left side of the operated door or lid at the whim of the user. The door or lid will be opened from either side by the user simply engaging the side of the door or lid which he/she requires to be opened without any technical knowledge required .

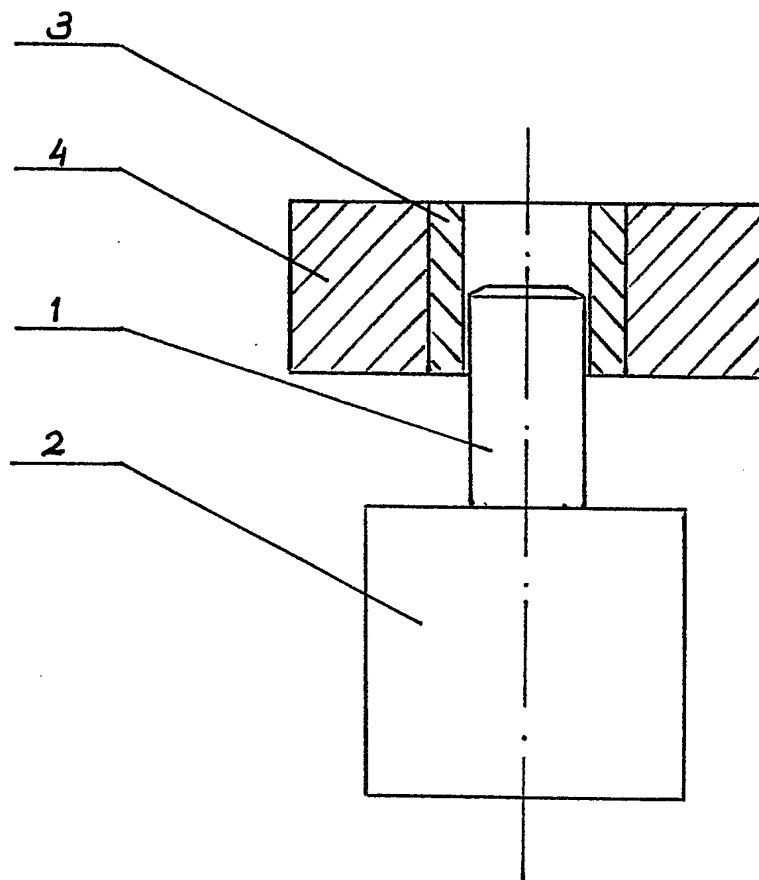
The control system will activate the hinge which is to become operative and deactivate the opposite hinge of the door or lid.

EXHIBIT "A"



DOOR WITH TWO HANDLES & TWO HINGES

EXHIBIT "B"



CLOSE UP OF HINGE